Agg A SOCIAL AND ECONOMIC CHARACTERISTICS OF SPANISH-ORIGIN HIRED FARMWORKERS IN 1973

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ABSTRACT

Spanish-origin and other ethnic groups of farm wageworkers are compared by age, sex, education, migratory status, employment, and earnings. Spanish-origin farmworkers in 1973 depended heavily on agriculture as a major source of employment and earnings. They appeared to have few viable alternatives to farmwork. Their farm earnings were generally higher than those of other ethnic groups working in agriculture; however, large household size, high dependency rates, and greater reliance upon agriculture for income may have reduced this economic advantage.

Keywords: Hired farmworkers, Farm labor, Spanish-origin farmworkers,

Anglo farmworkers, Black farmworkers, Migratory farmworkers,

Employment.

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SUMMARY

Contrary to the popular image, only a small proportion of the Nation's hired farmworkers are of Spanish origin; but, these workers depend heavily on agriculture as their major source of employment and earnings. They appear to have few viable alternatives to farmwork.

Spanish-origin people made up only 13 percent of the 2.7 million people employed as hired farmworkers. The majority (73 percent) were Anglo while blacks and others made up the remaining 14 percent. Neither were Spanish-origin farmworkers the predominant ethnic group in the migratory farm work force—Anglo, 63 percent; Spanish origin, 33 percent; and black and others, 4 percent.

The study finds a high degree of dependency on agriculture by the Spanish-origin farmworkers. They were employed in agriculture for longer periods during the year than other farmworker groups. They most often cited farm wagework as their principal activity and, for the large majority, farmwork was their only type of employment. When these workers did nonfarm work, it was usually only for short periods. In addition, Spanish-origin farmworkers were an older group of workers, often household heads or spouses, who had primary responsibility for their families' support. Thus, their earnings were probably the major contribution to family income.

In part, this agricultural dependence may be due to the lack of viable alternatives to farmwork. Few Spanish-origin workers left farmwork as they became older. They continued to rely heavily on agriculture for their major employment, while Anglo farmworkers appeared to move into generally higher paying nonfarm jobs as they became older, with only occasional employment in agriculture.

Spanish-origin farmworkers generally had very low levels of educational achievement. The majority had completed less than 4 years of schooling and only a small proportion finished high school. Low levels of education may have

restricted Spanish-origin farmworkers' access to higher paying, higher status employment.

While their farm earning levels were generally higher than those of other ethnic groups, large household size, high dependency rates, and a smaller income from nonfarm jobs may have reduced this economic advantage. Family financial problems may be compounded by the relatively large proportion of Spanish-origin farmworkers who were migratory and the comparatively long distances traveled to do farmwork. For these workers, increased travel costs, job insecurity, limited access to community services while traveling, and poor living conditions while in transit contributed to problems of low income.

SOCIAL AND ECONOMIC CHARACTERISTICS OF SPANISH-ORIGIN HIRED FARMWORKERS IN 1973

Leslie Whitener Smith, Sociologist

INTRODUCTION

This report presents information on the size and composition of the Spanishorigin segment of the hired farm labor force. In addition, it investigates differences between Spanish-origin and other ethnic groups of farm wageworkers by comparative analyses of age, sex, education, migratory status, employment, and earnings.

Farmworkers of Spanish origin may have escaped national attention because they were concentrated in the Southwest and because their problems were presumed to be the exclusive concern of local governments (8). This attitude has been reinforced by the lack of data on employment, education, and cultural patterns of this ethnic group (6). Also, since Spanish-origin people have been often classified in the white population, they have not immediately stood out as a distinct group.

However, in recent years, the Spanish-origin population has been targeted as a distinct population group having problems and needs unique to its cultural background and socioeconomic composition. Increasing political organization among this group (6), expanded media coverage of the farm labor movement led by Cesar Chavez (8, 11), and a national manpower policy which has come to recognize that diverse groups of people have diverse needs (4, 5) have all contributed to the recognition of the Spanish-origin population. Increasing interest in immigration problems and high fertility rates, and in the roles that Spanish-origin people play in the problems of farm labor and poverty have made this ethnic group an increasing source of concern (11).

DEFINITION OF CONCEPTS

There has been much disagreement over the proper terminology used to identify the Spanish-origin population. There are references to Spanish-American, Latin American, Chicano, Mexicano, Mexican American, hispano, la raza, and brown, among others, to describe Spanish-origin people. Added to the terminology problem are various and conflicting definitions. Spanish-speaking,

¹ Italicized numbers in parentheses refer to reference on pp. 18-19.

Spanish origin, Spanish surname, Spanish heritage, and Spanish ancestry each designate and measure a slightly different population.

Recent Congressional hearings (9) referred to this ethnic group as Americans of Spanish origin—a concept and term acceptable to the National Congress of Hispanic American Citizens and to several Federal agencies responsible for data collection. The National Congress of Hispanic American Citizens includes 95 national and local organizations representing 3 million Americans of Spanish origin. This concept is currently used by the Bureau of the Census in its monthly Current Population Survey (19).

Americans of Spanish origin, as defined in this report, include all those identifying themselves as Mexican American, Chicano, Mexican, Mexicano, Puerto Rican (living on the mainland), Cuban, Central or South American, or other Spanish from a listing of 19 ethnic groups in answer to the following Current Population Survey question:

"Which of the national or ethnic groups on this card best describes your ethnic origin or descent?"

German	Scottish	Cuban
Italian	Welsh	Central or South
Irish	Mexican American	American
French	Chicano	Other Spanish
Polish	Mexican	Negro
Russian	Mexicano	Black
English	Puerto Rican	

OR

Another group not listed

The term Anglo, while not truly descriptive of the wide-ranging origins of the U.S. white population, is used here as a convenient way to refer to white Americans other than those of Spanish origin. Black and other, as used in this report, includes blacks, Negroes, and other groups not listed above, such as Indians, Chinese, and Japanese.

Combination of various Spanish, Mexican, Cuban, and Puerto Rican groups into one category has limitations for research, particularly when dealing with the varying characteristics of the entire Spanish-origin population. This population is differentiated by cultural background, class, occupation, income, education, and other socioeconomic factors, just as are other ethnic groups. It is possible, however, to concentrate on one occupational segment of the Spanish-origin population—hired farm labor—which has certain characteristics in common with its members. Furthermore, of those Spanish-origin workers doing 25 to 249 days of farmwork, almost 95 percent were identified as Mexican American, suggesting a fairly high degree of homogeneity of cultural background and characteristics.

Farmworkers are defined here as persons 14 years of age and over in the civilian noninstitutional population who did farmwork for wages at some time during 1973, even if only for 1 day. This work included production, harvesting, and delivery of agricultural commodities, as well as management of a farm if done for cash wages. Exchange work, work done by family members without pay, custom work, or work done exclusively for pay in kind were not included.

Source of data and reliability of estimates are discussed in the appendix.

SOCIOECONOMIC CHARACTERISTICS

Number and Region

According to popular image, Spanish-origin workers are mostly employed as agricultural laborers. Related to this is the idea that the hired farm working force is predominately of Spanish origin. Neither of these images is true at the national level.

Table 1 indicates that, in 1973, only 4.4 percent of the employed Spanish-origin population was engaged in agriculture as farmers, farm managers, laborers, or foremen. Although approximately 30 percent of the employed Spanish-origin population was employed in white-collar jobs, only 12 percent was engaged in higher paying, higher status professional and managerial categories. A large proportion was engaged in low paying, low-skilled jobs. Major occupations were operatives, service workers, and clericals. Moore indicates that Mexican Americans "hold few professional, managerial, and sales jobs because of low educational achievement, lack of business capital, a cultural dissimilarity, and physically apparent membership in a low prestige group which probably eliminates many sales and supervisory jobs" (11, p. 31).

The national hired farm working force is predominately Anglo (73 percent). Spanish-origin workers comprised 13 percent of the total 2.7 million persons in

Table 1-Major occupational groups of the Spanish-origin population 16 years old and over. March 1973

Occupational group	Total
Employed persons 16 years and over	3,363,000
	Percent
White collar:	29.8
Professional, technical, and kindred workers	6.9
Managers and administrators	5.4
Sales workers	3.9
Clerical and kindred workers	13.6
Blue collar:	48.9
Craftsmen and kindred workers	12.6
Operatives, including transportation	28.3
Laborers, excluding farm	8.0
Farmworkers:	4.4
Farmers and farm managers	.2
Farm laborers and foremen	4.2
Service workers:	16.9
Service workers	15.2
Private household workers.	1.7

Source: U.S. Bureau of the Census, Current Population Reports, P-20, No. 264, "Persons of Spanish Origin in the United States: March 1973," U.S. Govt. Print. Off., Washington, D.C., 1974.

this force; blacks and others accounted for 14 percent. Consequently, these data do not support the common belief that most farmworkers are of Spanish origin. Even when the hired farm labor force is examined on a multi-State regional basis (see fig. 1), there is no evidence that the majority of farmworkers for any region are of Spanish origin. Although the western farm labor force included a larger proportion of Spanish-origin farmworkers than other areas, Anglos accounted for the largest proportion of workers in all regions (table 2). Combination of the southern and western regions—an area containing 95 percent of the Spanish-origin farmworkers—still reveals a majority (61 percent) of Anglo workers, compared with 19 percent Spanish-origin, and 20 percent black and others.²

Table 2-Distribution of farm wageworkers, by ethnic group and region, 1973

	Region										
Ethnic group	Northeast		1	North Central		South		West		otal	
	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.	Thous.	Pct	. Thous	Pct.	
Anglo	192 7 12	90 4 6	743 11 12	97 1 2	551 106 301	58 11 31	478 215 42	65 29 6	1,964 339 367	73 13 14	
Total ¹	211	100	767	100	959	100	735	100	2,671	100	

¹ Numbers may not add to totals due to rounding.

Age and Sex

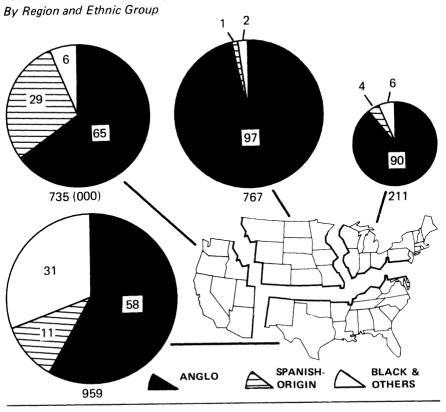
The age and sex distribution of an occupational group often indicates the extent to which members are involved in or dependent upon that occupation for employment. Younger workers and women of childbearing age, if employed at all, often work on a temporary or part-time basis. Older workers, particularly male household heads with family and financial responsibilities, tend to be more committed to an occupation on a full-time basis. The age and sex distribution of Spanish-origin, Anglo, and black and other farmworkers is shown in figure 2.

The minority groups—Spanish-origin and black and others—were older (median ages of 30 and 38 years, respectively) than Anglos (median age of 22). While most Anglo workers were teenagers and young adults aged 14-24, who did farmwork on a casual basis after school and during summer vacations. most Spanish-origin workers were between 25 and 54, the prime working ages. About 64 percent of the Spanish-origin farmworkers were classed as household heads or spouses; they were probably major contributors to household support. In contrast, less than half the Anglo farmworkers were categorized as heads or spouses (table 3).

² All statements of comparison appearing in the text, but not necessarily in the tables, are significant at the 1.6 standard error (90 percent) level or higher. See page 15 for more detail on reliability of estimates and levels of significance.



FIGURE 1



FARM WAGEWORKERS, 1973

FIGURE 2

By Age, Sex, and Ethnic Group

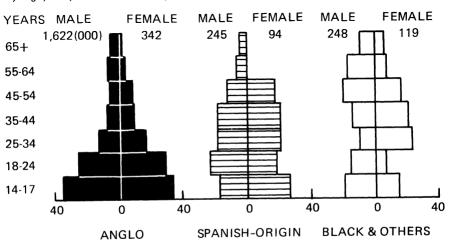


Table 3-Distribution of farm wageworkers, by ethnic group and household status, 1973

Household status	Ethnic group									
	Anglo		Spanish- origin		Black and others		Total			
	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.		
Heads and spouses Other members	912 1,052	46 54	217 122	64 36	246 121	67 33	1,375 1,295	51 49		
Total ¹	1,964	100	339	100	367	100	2,671	100		

¹ Numbers may not add to totals due to rounding.

The proportion of Anglo workers decreases in the older age groups (fig. 2). It appears that, as Anglos become older, they tend to find job alternatives to agriculture. However, this is not true for Spanish-origin farmworkers. This work force segment has relatively large proportions of workers at the older age levels, indicating limited job alternatives. Consequently, they are more likely to be dependent on agricultural employment than Anglos for their support.

Females comprised only a small portion (21 percent) of the hired farm working force. The proportions of females varied by ethnic group. Females were approximately 30 percent of the combined Spanish-origin and black and other groups, compared with 17 percent of the Anglos. Generally, women in the Spanish-origin farm labor force were older than Anglo women. There is some evidence that they did farmwork for longer periods of time during the year. Approximately 66 percent of the Spanish-origin females did farmwork for 25 days or more contrasted with 34 percent of the Anglo females. For the Spanish-origin and black and other females who worked out of economic necessity, farmwork offered an easily accessible type of employment requiring little education, skill, or experience.

Education

Low levels of formal education often mean that a worker can obtain only relatively low paying types of employment with limited occupational mobility. Farmworkers in general have been found to have lower educational levels than most other major U.S. occupational groups (12, 3). Farmworkers 25 years and older in 1973 had little more than a grade school education with a median of 8.0 years, and thus were considerably disadvantaged compared to all workers 25 years and over who had a median education of 12.4 years (18).

Educational attainment was even lower for various segments of the hired farm labor force, particularly for those of Spanish origin (table 4). The median number of years of education for Spanish-origin farmworkers 25 years of age and over was 4.5 years. Functional illiteracy is commonly defined in terms of less than 5 years of education. In comparison, blacks and others were only slightly higher with 5.8 median years of education; Anglo workers had a median of 9.7 years. Thus, even among a generally lower educated group of workers, a

Table 4 – Median years of school completed for all farm wageworkers, by ethnic group and age, 1973

	Ethnic group								
Years of age	Anglo	Spanish- origin	Black and others	Total ¹					
	Years								
All	9.1 (1,96 8.9 (1,20 9.7 (763 12.1 (432 7.7 (331	7.0 (137) 4.5 (203) 4.7 (132)	6.8 (367) 8.0 (114) 5.8 (253) 7.4 (110) 3.4 (143)	8.4 (2,671) 8.6 (1,452) 8.0 (1,218) 9.6 (673) 6.7 (545)					

¹ Numbers may not add to totals due to rounding. ² Numbers in parentheses represent base numbers for medians (in thousands).

sizable gap exists between minorities and Anglos. Spanish-origin farmworkers 25 years and over attained less than half of the median educational levels of Anglo workers; blacks and others achieved less than two-thirds as much education as Anglos. The largest difference (7.4 years) occurred between Anglo and Spanish-origin workers aged 25-44 years.

Spanish-origin workers from 14 to 24 years of age have significantly higher levels of education than older groups of Spanish-origin farmworkers. Furthermore, differences in educational attainment between the ethnic groups at the younger age level are not significant. Young Spanish-origin workers had a median of 7 years compared with 8.9 years for Anglos and 8 years for black and other workers

In 1973, only 11 percent of Spanish-origin farmworkers 25 years and over had some high school education, compared with 55 percent of the Anglo workers. Blacks and others also differed significantly from Anglo farmworkers with only 25 percent receiving some high school education. Only 2 percent of Spanish-origin farmworkers 25 years and over had finished high school, compared with over one-third of the Anglos and 13 percent of the blacks and others (table 5).

Table 5-Distribution of farm wageworkers 25 years of age and over, by ethnic group and years of school completed, 1973

School years completed		Ethnic group									
	Anglo		Spanish- origin		Black and others		Total				
	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.			
0-4	82 264 153 265	11 34 20 35	111 67 19 5	56 33 9 2	110 81 29 32	43 32 12 13	301 413 202 301	25 33 17 25			
Total ¹	763	100	203	100	252	100	1,218	100			

¹ Numbers may not add to totals due to rounding.

Migratory Status

In 1973, there were 203,000 migratory workers in the United States – about 8 percent of the hired farm work force. Of these workers, 63 percent were Anglo, 33 percent were Spanish-origin, and 4 percent were blacks and others. Thus, persons of Spanish origin composed a larger proportion of the migratory workers than they did of the total hired farm working force (33 percent compared to 13 percent, see fig. 3).

While the majority of migrant workers were not of Spanish origin, as often presumed, substantial variation existed among geographic regions. In the South, over 60 percent of the migratory workers were of Spanish origin. This proportion drops to 35 percent in the West and to less than 0.5 percent elsewhere. However, among Spanish-origin farmworkers, a larger proportion were migratory compared with other ethnic groups (table 6). About one of every five Spanish-origin farmworkers was migratory, compared with one in 15 Anglos, and one in 40 blacks and others.

Table 6-Distribution of farm wageworkers, by ethnic group and migratory status, 1973

Migratory status	Ethnic group										
	Anglo		Spanish- origin		Black and others		Total				
	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.			
Migratory Nonmigratory	127 1,837	6 94	68 271	20 80	9 358	2 98	203 2,468	8 92			
Total	1,964	100	339	100	367	100	2,671	100			

Spanish-origin migratory workers generally traveled greater distances than others to do farmwork. Approximately 88 percent traveled 400 miles or more while over half migrated 1,000 miles or more away from home (table 7). In contrast, Anglo workers traveled for shorter distances with only 28 percent migrating 1,000 miles or more. The distance traveled and time spent in transit to places of farmwork can have severe effects on the economic welfare of a farmworker and his family. While migrant farmworkers generally received higher earnings than other farm wageworkers, increased travel costs, job insecurity, limited access to community services while traveling, isolation from family and

³ Migrant workers include all persons who left their homes temporarily overnight to do farmwork in a different county within the same State or in a different State with the expectation of eventually returning home; or had no usual place of residence, and did farm wagework in two or more counties during the year.

⁴ Distance traveled included only the number of miles traveled from home to place of work and did not include travel to return home.

By Migratory Status and Ethnic Group ANGLO SPANISH-ORIGIN ORIGIN BLACK & OTHERS 4 73 MIGRANT 203(000) ALL 2,671

FIGURE 3

FARM WAGEWORKERS, 1973

Table 7-Distribution of migratory farmworkers, by ethnic group and distance traveled, 1973

Miles traveled	Anglo		Spanish- origin		Black		Total	
	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.
Fewer than 75	37	29	1	1	1	(¹)	40	20
75-199	29 10	23 8	3 5	4 7	2	(¹)	33 16	16 8
400-499	12	10	11	16	-	(1)	24	12
500-999	3	2	12	19	-	(1)	15	7
1,000 or more	35	28	35	53	4	(¹)	74	37
Total ²	127	100	68	100	9	(¹)	203	100

¹ Percentage not shown where base is less than 50,000 persons. ² Numbers may not add to totals due to rounding.

friends, and frequently poor living conditions while in transit complicated problems of low income.

In addition, compared with Anglo migrant workers, a greater proportion of Spanish-origin migrants were either household heads or spouses (table 8). This finding also suggests that the economic and social impacts of migrancy are greater for Spanish-origin migrant families, as a group, than for Anglo families.

Table 8-Distribution of migratory farmworkers, by ethnic group and household status, 1973

Household status	Anglo		Spanish- origin		Black and others		Total	
	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.
Head	43	34	38 15	56 22		(¹) (¹)	90 16	44 8
years	43	35	9	13		(¹)	52	25
Others 18 years and over	39	31	6	9		(¹)	46	23
Total ²	127	100	68	100	9	(¹)	203	100

¹ Percentages not shown where base is less than 50,000 persons. ² Numbers may not add to totals due to rounding.

Employment Characteristics

Generally, Spanish-origin farmworkers were employed in agriculture for longer periods during the year than Anglo workers. Around 26 percent worked fulltime (250 days or more) compared with only 14 percent of the Anglos (table 9). Conversely, 22 percent of Spanish-origin farmworkers did casual farm-

Table 9-Distribution of farm wageworkers, by ethnic group and duration of farmwork, 1973

Days of farmwork	Ethnic group									
	Anglo		Spanish- origin		Black and others		Total			
	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.		
Fewer than 25	900	47	76	22	110	30	1.085	41		
25-149	657	33	114	34	146	39	918	34		
150-249	125	6	61	18	61	17	247	9		
250 and over	282	14	89	26	50	14	421	16		
Total ¹	1,964	100	339	100	367	100	2,671	100		

¹ Numbers may not add to totals due to rounding.

work for fewer than 25 days. Almost 50 percent of the Anglos were employed in farmwork for fewer than 25 days. Black and other farmworkers were also employed in farmwork for longer periods than Anglos, but did not differ significantly from Spanish-origin farmworkers.

Forty-nine percent of all Spanish-origin farmworkers cited farm wagework as their major activity during the year, compared with only 21 percent of the Anglos (table 10). Instead, the majority of Anglos cited "not in the labor force" as their principal activity. Students accounted for 44 percent of the Anglo farmworkers, compared with only 19 percent of the Spanish-origin workers.

The survey data show that a large part of the hired farm work force consists of persons whose principal activity during the year is something other than farmwork. Many of the casual workers are students and housewives who work in the fields for several weeks or a month during the year, especially during harvest periods of peak labor demand. While they are an important segment of the farm

Table 10-Distribution of farm wageworkers, by ethnic group and chief activity, 1973

	Ethnic group									
Chief activity	Anglo		Spanish- origin		Black and others		Total			
	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.		
Farm wagework	407	21	167	49	146	40	720	27		
Other farmwork ¹	119	6	13	4	23	6	155	6		
Nonfarm work	337	17	35	10	50	14	422	16		
Unemployed	22	1	6	2	4	1	32	1		
Not in labor force	1,080	55	118	35	145	39	1,342	50		
Keeping house	135	7	45	13	50	13	230	9		
Attending school	857	44	64	19	67	18	988	36		
Other	88	4	9	3	28	8	125	5		
Total ²	1,964	100	339	100	367	100	2,671	100		

 $^{^{1}}$ Includes unpaid family labor and operating a farm. 2 Numbers may not add to totals due to rounding.

labor force, they are not primarily farm wageworkers. Thus, persons who do farmwork for fewer than 25 days are removed from the following analysis to present a picture of the earning characteristics of the core hired farm work force. Anglos comprised the majority (83 percent) of these casual workers.

Spanish-origin workers in the core group—those doing 25 days or more of farmwork—were employed in agriculture for an average of 180 days in 1973 compared with 149 days for Anglos and 146 days for blacks and others. Approximately 57 percent of Spanish-origin farmworkers worked 150 days or more during the year. In contrast, the majority (61 percent) of Anglo workers were employed for only 25 to 149 days.

Spanish-origin workers in the core group relied heavily on farmwork as their major source of employment; only 15 percent did any nonfarm work during the year (table 11). In contrast, 36 percent of the Anglos and 33 percent of the blacks and others did some nonfarm work. When Spanish-origin workers performed nonfarm work, they averaged fewer days than did Anglo workers. Furthermore, there is some evidence to indicate that Spanish-origin workers averaged fewer days of nonfarm work than blacks and others.

Table 11 – Distribution of persons who did 25 days or more of farmwork, by ethnic group and type of wage work performed, 1973

Type of wagework performed	Ethnic group										
	Anglo		Spanish- origin		Black and others		Total				
	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.	Thous.	Pct.			
Farm wagework only Farm and nonfarm	677	64	225	85	173	67	1,073	68			
wagework	387	36	39	15	84	33	513	32			
Total¹	1,064	100	264	100	258	100	1,586	100			

¹ Numbers may not add to totals due to rounding.

Earnings are perhaps the most important indicator of economic well-being and dependence on agriculture. There is some evidence that levels of earnings varied among the ethnic groups. In 1973, Spanish-origin workers working 25 days or more at farmwork averaged \$3,397 in total earnings from farm and nonfarm work, compared with averages of \$2,941 for Anglos and \$2,477 for blacks and others (table 12).⁵ Furthermore, Spanish-origin farmworkers received 92 percent of their earnings from farmwork, and over four-fifths had no other source of earnings. Anglo farmworkers received about 73 percent of their earnings from farmwork.

Various data suggest that the Spanish-origin farmworkers' realization of relatively higher wages is characteristic only of the western region, where most of the Spanish-origin workers reside. A recent study of hired farmworkers in New York shows that both Puerto Rican and Mexican workers have median incomes

⁵ Estimates of total cash wages do not include the value of perquisites or fringe benefits received in connection with farm or nonfarm work.

Table 12-Average number of days worked and wages earned at farm and nonfarm work, by ethnic group for all persons who did 25 days or more of farm wagework, 1973

A	Ethnic group							
Average days worked and wages earned ¹	Anglo	Spanish- origin	Black and others	Total				
Number of workers (Thous.)	1,064	264	258	1,586				
Farm and nonfarm:								
Days worked	190	196	171	188				
Wages earned per year (Dol.)	2,941	3,397	2,477	2,942				
Wages earned per day (Dol.) ²	15.60	16.85	14.55	15.70				
Farm:								
Days worked	149	180	146	154				
Wages earned per year (Dol.)	2,158	3,117	2,061	2,303				
Wages earned per day (Dol.) ²	13.75	16.50	14.10	14.95				
Nonfarm:								
Days worked	40	16	25	34				
Wages earned per year (Dol.)	783	280	416	640				
Wages earned per day (Dol.) ²	19.20	17.75	16.95	19.00				

¹ Average days worked times daily wages may not add to annual earnings due to rounding. ² Daily wages are rounded to the nearest 5 cents.

below that of whites (1). A New Jersey report indicates similar results with Puerto Ricans and blacks earning an agricultural income considerably below that of white farmworkers (16). While wage and earnings data from this study are not available to make comparisons for all regions, data for the South indicate that daily farm wages for all Anglo workers were about \$2.00 per day higher than wages of Spanish-origin workers. In the West, however, Anglo workers earned about \$1.25 less in farm wages per day than Spanish-origin farmworkers.

While additional research is needed to determine specific reasons for the difference in earning levels among farmworker ethnic groups, some possible explanations are suggested by these data. Higher earning levels for Spanish-origin workers were a result of both a greater number of days worked and higher daily wages. Generally, farm wages—the more important source of Spanish-origin workers' earnings—are higher in the West than in other regions. In 1973, average daily farm wages for all farmworkers in the West were \$18.75 compared with \$14.30 in the Northeast, \$13.35 in the North Central region, and \$12.60 in the South. Daily wages among the nonwestern regions did not differ significantly. Since most Spanish-origin workers were located in the West, regional variations in wage rates partially explain the higher daily earnings for Spanish-origin workers. Blacks and others were predominately located in the South. Anglos were more evenly distributed across the United States.

Also, wage rates may be higher for Spanish-origin workers because of increased skills accrued from longer periods of farm employment. Rosedale and Mamer indicate that to the extent worker skill and competency increase with experience, longer work periods increase the worker's potential for earnings (13). Data in this study support that conclusion. In 1973, farm wages for all farmworkers increased with duration of farmwork (table 13), and a greater proportion of Spanish-origin workers were employed for longer periods of farmwork compared to other ethnic groups.

Table 13-Average number of days worked and wages earned at farm wagework for all farmworkers, by duration of work, 1973

Days of Number	Numbers of	D	Wages	earned	
farmwork		Per year	Per day		
		·	Do	llars	
Fewer than 25	1,085	9	111	12.10	
25-74	567	46	590	12.70	
75-149	351	104	1,373	13.25	
150 or more	668	271	4,244	15.65	

¹ Daily wages rounded to nearest 5 cents.

Finally, Fogel, discussing the relatively high income of Mexican Americans despite low educational levels, suggests that, "... the answers may lie in dimensions which are difficult to measure—motivation, abilities, and labor market discrimination that is less intense than against other minorities" (7, p. 18). Similarly, Beckett found that California farm laborers of Mexican ancestry had higher productivity levels. He suggests motivation and ability as "most likely possible causes" for the Mexican American's relatively higher earnings power in relation to his educational attainment (2).

Spanish-origin farmworker households tend to lose their slight advantage stemming from higher farm earnings when household size and number of dependents are considered. Spanish-origin households tend to be larger than other ethnic households. In 1973, there were approximately 192,000 Spanish-origin farmworker households averaging 5.5 persons per household. In comparison, Anglo households averaged 3.8 members and blacks and other households averaged 3.6 persons per household. At the same time, Spanish-origin households had more dependents under 18 years of age—1.2 for every member 18 years and over, compared with 0.6 for Anglo and blacks and others. Data are not available for the core farmworker households where a farmworker did 25 days or more of farmwork. However, it is doubtful that these households would differ significantly in size from the total.

IMPLICATIONS

Improvement of the general economic well-being of Spanish-origin farm-workers depends in large part upon increased access to various types of higher paying nonfarm employment. A partial solution to increasing nonfarm employment opportunities may lie in the development of manpower programs to provide the education and skill levels required for other types of employment. However, program development and implementation should consider the particular attributes and characteristics of Spanish-origin farmworkers that may suggest special manpower training needs. Their age and sex distribution, large household size, high dependency ratio, high degree of migrancy, strong agricultural dependence, and educational disabilities need to be considered in program formulation

APPENDIX

SOURCE OF DATA AND RELIABILITY OF ESTIMATES

Source of Data

Data for this study were obtained in December 1973 from special questions on the annual Hired Farm Working Force survey conducted for the Economic Research Service, U.S. Department of Agriculture, by the Bureau of the Census as a supplementary part of the Current Population Survey (17). The sample was drawn from 461 areas including 923 counties and independent cities, with coverage in each of the 50 States and the District of Columbia. The survey did not extend to Puerto Rico or other territories and possessions of the United States. Approximately 45,000 households were interviewed.

Estimates in this report concern persons 14 years of age or older who did farm wagework in 1973. Persons performing hired farmwork during 1973 but who died, entered the Armed Forces, or were no longer in the civilian noninstitutional population for other reasons prior to the field collection are not included in this report. Also not included are foreign nationals who did farm wagework in this country and returned home before the survey. (The number of foreign nationals admitted declined sharply after the termination of Public Law 78 in December 1964, and in 1973 totaled only 12,888.)

The estimating procedure used in this survey involved the expansion of the weighted sample results to give estimates of the civilian noninstitutional population of the United States by age, race, and sex. These estimates were based on statistics from the 1970 Census of Population; statistics of births, deaths, immigration, and emigration; and from the Armed Forces.

Reliability of Estimates

Since the estimates were based on a sample, they may differ somewhat from figures obtained if a complete census had been taken using the same schedules, instructions, and enumerators. As in any survey work, results are subject to response and reporting errors as well as to sampling variability.

The standard error is primarily a measure of sampling variability. Variations occur by chance because a sample, rather than all the population, is surveyed. As calculated for this report, the standard error also partially measures the effect of response and enumeration errors but does not measure any systematic biases in the data. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census figure by less than the standard error. The chances are about 90 out of 100 that the difference would be less than 1.6 times the standard error, and the chances are about 95 out of 100 that the difference would be less than twice the standard error.

⁶ Unpublished information from Employment and Training Adm., U.S. Dept. Labor. Number does not include foreign nationals admitted to do sheepherding or logging.

All statements of comparison appearing in the text, but not necessarily in the tables, are significant at the 1.6 standard error level or higher, and most are significant at a level of more than 2.0 standard errors. Statements of comparison qualified in some way (by use of the phrase "some evidence") have a level of significance between 1.6 and 2.0 standard errors.

Figures presented in app. table 1 are approximations of the standard errors of various estimates shown in this report. These approximations provide an indication of the order of magnitude of the standard errors, rather than a precise standard error for any specific item. App. table 2 contains the standard errors of estimated percentages. App. tables 3, 4 and 5 contain the standard errors of estimated averages. For more detailed information on the statistical methods used with CPS data, see reference 17.

This report shows that there were 339,000 Spanish-origin hired farmworkers in 1973. App. table 1 shows the standard error on an estimate of this size to be approximately 34,000. The chances are 68 out of 100 that the estimate would have shown a figure differing from a complete census by less than 34,000. The chances are 95 out of 100 that the estimate would have shown a figure differing from a complete census by less than 68,000.

Of these 339,000 Spanish-origin farmworkers, 68,000 or 20 percent were migratory workers. App. table 2 shows the standard error of 20 percent on a basis of 339,000 to be approximately 3.9 percent. Consequently, chances are 68 out of 100 that the estimated 20 percent would be within 3.9 percent of a complete census figure, and chances are 95 out of 100 that the estimate would be within 7.8 percent of a census figure; for example, this 95-percent confidence interval would be from 12.2 to 27.8 percent.

This report also shows the average annual earnings from farm wagework for all Spanish-origin farmworkers were \$3,117. App. table 4 shows the standard error for that level of earnings, on a basis of 339,000 workers, to be approximately \$145. Consequently, chances are 68 out of 100 that the estimated \$3,117 would be within \$145 of a complete census figure, and chances are 95 out of 100 that the estimate would be within \$290 of a census figure; i.e., this 95-percent confidence interval would be from \$2,827 to \$3,407.

Appendix table 1-Standard errors for estimated numbers of farm wageworkers 1

168	chances	out	αf	100
100	chances	oui	o	, ,,,,,

Size of estimate	Standard error		
25,000	9,000		
50,000	12,000		
100,000	18,000		
250,000	29,000		
500,000	42.000		
,000,000	65,000		
2,500,000	121,000		
3,000,000	139.000		

¹ Standard errors for number of persons in farm wageworker households are the same as for farm wageworkers.

Appendix table 2-Standard errors of percentage of farm wageworkers1

(68 chances out of 100)

F 4:4-1	Base of percentage in thousands									
Estimated percentage	25	50	100	250	500	1,000	2,000	3,000		
	Percent									
2 or 98	4.9 7.6 10.5 12.5 14.0 15.1 16.6 17.4	3.5 5.4 7.4 8.8 9.9 10.7 11.8 12.3	2.4 3.8 5.2 6.2 7.0 7.6 8.3 8.9	1.5 2.4 3.3 3.9 4.4 4.8 5.3 5.5	1.1 1.7 2.3 2.8 3.1 3.4 3.7 3.9	0.8 1.2 1.7 2.0 2.2 2.4 2.6 2.8	0.5 0.8 1.0 1.2 1.4 1.5 1.7	0.4 0.7 1.0 1.1 1.3 1.4 1.5		

¹ See footnote, app. table 1.

Appendix table 3-Standard errors of average number of days of farm wagework

(68 chances out of 100)

Average number of days of farm wage-	Base of average in thousands of farm wageworkers								
work per year per person	50	100	250	500	1,000	2,500	3,000		
10	1.2 3.5 10.2 19.2 19.7 15.5 11.3 7.1	1.0 3.1 7.2 13.6 14.0 11.0 8.0 5.0	0.7 2.2 5.7 9.6 9.5 7.0 5.0 3.0	0.5 1.5 4.0 6.8 6.8 5.0 3.5 2.0	0.4 1.3 3.4 5.0 3.6 3.0 1.3 0.8	0.3 0.9 2.3 3.3 2.4 2.0 0.9	0.2 0.7 2.0 2.9 2.1 1.7 0.7		

Note: App. table 3 pertains to averages computed from distributions allowed to vary over the entire range of days worked. Standard errors for truncated distributions (e.g., workers with fewer than 25 days of farm wagework) are somewhat smaller.

Appendix table 4-Standard errors of average annual earnings from farm wagework

68 chances out of 100

Average dollar earnings from	Base of average in thousands of farm wageworkers								
farm wagework per year per person	50	100	250	500	1,000	2,500	3,000		
150	31	22	14	10	9	6	5		
250	58	41	26	19	16	11	10		
500	118	84	53	41	35	23	21		
750	178	126	80	64	54	36	33		
1,000	219	155	98	85	68	45	41		
2,000	314	223	141	132	96	64	58		
3,000	331	235	149	138	99	66	60		
4,000	340	241	153	141	100	67	61		
5,000	344	244	155	142	100	67	61		
6,000	346	245	156	142	100	67	61		

Appendix table 5-Standard errors of average daily earnings from farm wagework

(68 chances out of 100)

Average dollar earnings from	Base of average in thousands of farm wageworkers								
farm wagework per day per person	50	100	250	500	1,000	2,500	3,000		
5.00	0.60	0.42	0.27	0.19	0.14	0.09	0.08		
7.00	1.13	.81	.51	.36	.26	.17	.15		
9.00	1.46	1.04	.66	.66	.35	.23	.20		
11.00	1.52	1.08	.68	.53	.43	.28	.25		
13.00	1.54	1.09	.69	.55	.47	.31	.27		
15.00	1.57	1.11	.71	.56	.50	.33	.29		
17.00	1.59	1.13	.73	.57	.52	.34	.30		
19.00	1.61	1.15	.75	.59	.53	.35	.31		
21.00	1.62	1.16	.76	.60	.54	.36	.31		

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